Excerpted from the *2006 Purchasing Guide for Flexible Fuel Vehicles* published by the National Ethanol Vehicle Coalition www.E85Fuel.com

Frequently Asked Questions About Flexible Fuel Vehicles

Why should we use ethanol?
Besides its superior performance characteristics, ethanol burns cleaner than conventional gasoline; it is a completely renewable, domestically produced, environmentally friendly fuel that enhances the nation's economy and energy security. Today, the U.S. imports nearly 60% of its petroleum and our overall consumption continues to increase. By supporting fuel ethanol and its use, U.S. motorists can help reverse that trend.

What happens when E85 is not available?
The flexible fuel vehicle (FFV) system allows the driver to use any combination of gasoline or ethanol -- from 100% unleaded gasoline to 85% ethanol. A driver can therefore use unleaded gasoline if E85 is not available.

What are the differences between an FFV and a regular gasoline-only model? Are different parts used?
The primary difference is the fuel sensor that detects the ethanol/gasoline ratio. A number of other parts on the FFV's fuel delivery system are modified to be ethanol compatible. The fuel tank, fuel lines, fuel injectors, computer system and antisiphon device have been modified slightly. Alcohol fuels can be more corrosive than gasoline; therefore; fuel system parts have been upgraded to be ethanol compatible.

Does an FFV cost more than a gasoline-only model?
When manufacturers offer a flexible-fuel engine as an option in their vehicles, there is little to no additional cost. In model year 1998, manufacturers began making flexible-fuel engines standard on certain makes and models.

Can I convert my existing gasoline powered vehicle to run on E85?
Presently, there is not a kit available for converting a gasoline-only vehicle to E85. Vehicles and the fuels for them are carefully designed and their emissions, safety and performance are closely monitored and certified. Today's models are certified for up to 10% ethanol (E10) blends. Conversion kits that are presently available for propane and natural gas vehicles have undergone extensive and expensive testing to ensure they operate properly. The NEVC does not advocate fueling a gasoline-only passenger vehicle with E85 (and doing so just might be against federal law).

What is the range of a flexible-fuel vehicle?
Ethanol has a lower energy density than conventional gasoline. However, E85 also has a much higher octane rating (100+) than gasoline. FFVs are "flexible" and not dedicated to E85 and some drivers may experience a 5% to 15% drop in fuel economy. However, you'll find the economic, environmental, and energy security benefits of E85 outweigh any variation.

The fuel economy of any vehicle will vary with temperature, road conditions, driving habits, and other factors. Aggressive driving habits can result in a 20% loss and low tire pressure can reduce mileage by 6%.

How does E85 compare to unleaded gasoline?
E85's high-performance benefits include a 100+ octane rating compared to the 87-octane rating for regular gasoline. In addition, the high ethanol content of E85 can actually boost engine horsepower an estimated 5%! Some drivers may experience a slight decrease in fuel economy due to the lower energy content of the fuel; however, you'll find the economic, environmental and energy security benefits of E85 outweigh any variation.

What is the price of E85?
E85 prices vary by the market being considered. Typically, E85 is about 20 to 30 cents less than regular unleaded gasoline. However, as is the case with all forms of fuel, the larger the network of fueling outlets, the more competitively priced is the fuel.

Is E85 more toxic or dangerous than gasoline?
No. 100% ethanol can be ingested by human beings. The fuel ethanol must be "denatured" or poisoned with gasoline or a bitter agent to prevent ingestion. Also, ethanol does not contain the same harmful carcinogens and toxins found in gasoline.